

AMENDMENTS TO THE CLAIMS

1. (Previously Presented) An isolated DNA comprising a nucleotide sequence encoding the following polypeptide (a) or (b):

(a) a polypeptide, consisting of an amino acid sequence identical to the amino acid sequence represented by SEQ ID NO: 2; or

(b) a polypeptide, consisting of an amino acid sequence derived from the amino acid sequence represented by SEQ ID NO: 2 by deletion, substitution, or addition of within one to twenty amino acids and having N-acetylglucosamine transferase activity.

2. (Previously Presented) An isolated DNA (c) or (d) as follows:

(c) a DNA, comprising the nucleotide sequence represented by SEQ ID NO: 1 and containing the nucleotide sequence that encodes the amino acid sequence represented by SEQ ID NO: 2; or

(d) a DNA, hybridizing under stringent condition of 1 x SSC, 0.1% SDS and 37 °C to a DNA consisting of a nucleotide sequence complementary to that of the DNA (c) and encoding a protein having N-acetylglucosamine transferase activity.

3. (Cancelled)

4. (Previously Presented) An expression vector, comprising the DNA of claim 1 or claim 2.

5. (Original) A transformant, comprising the vector of claim 4.

6.-17. (Cancelled)

18. (Currently Amended) An isolated polynucleotide, hybridizing under stringent conditions of 1 x SSC, 0.1% SDS and 37 °C to at least one of the DNA of claim 1 or 2, wherein the DNA comprises following DNA (a)-(f):

~~(a) a polypeptide, consisting of an amino acid sequence identical to the amino acid sequence represented by SEQ ID NO: 2;~~

~~(b) a polypeptide, consisting of an amino acid sequence derived from the amino acid sequence represented by SEQ ID NO: 2 by deletion, substitution, or addition of within one to twenty amino acids and having N-acetylglucosamine transferase activity;~~

~~(c) a DNA, comprising the nucleotide sequence represented by SEQ ID NO: 1 and containing the nucleotide sequence that encodes the amino acid sequence represented by SEQ ID NO: 2;~~

~~(d) a DNA, hybridizing under stringent condition of 1 x SSC, 0.1% SDS and 37 °C to a DNA consisting of a nucleotide sequence complementary to that of the DNA (c) and encoding a protein having N-acetylglucosamine transferase activity;~~

~~(e) a DNA of claim 1 encoding the amino acid sequence represented by SEQ ID NO: 3 or 4 and consisting of at least 15 nucleotides; and~~

~~(f) a DNA, consisting of a nucleotide sequence complementary to that of the DNA (e).~~

19. (Previously Presented) The polynucleotide of claim 18, which consists of the nucleotide sequence encoding the amino acid sequence represented by SEQ ID NO: 3 or 4, or which consists of the nucleotide sequence which is complementary to the nucleotide sequence encoding the amino acid sequence of SEQ ID NO: 3 or 4.

20. (Withdrawn) A method for detecting carcinoma using the polynucleotide of claim 18 as a probe, comprising the steps of:

- (a) bringing a test sample into contact with the polynucleotide; and
- (b) detecting whether the polynucleotide and the test sample hybridize.

21. (Previously Presented) A method for producing a protein comprising culturing the transformant according to claim 5 and inducing expression of the DNA.